



Quality Enhancement Research Initiative

Ischemic Heart Disease

Ischemic Heart Disease

Ischemic heart disease (IHD) is the leading cause of death in the United States for both men and women, with \$100 billion in direct and indirect costs. It is also one of the most frequent indications for hospitalization within VA's healthcare system. However, despite the availability of nationally developed, evidence-based clinical guidelines, many patients with IHD are not receiving optimal therapy.

The Ischemic Heart Disease Quality Enhancement Research Initiative (QUERI-IHD) utilizes the QUERI process (see back page) to reduce the gap between guideline recommended therapies and actual VA practice, thus improving the quality of care and health outcomes of veterans with ischemic heart disease. QUERI-IHD is currently focused on a clinical problem within the broad scope of IHD that is characterized by both high risk and high volume: outpatient management of lipid risk reduction. QUERI-IHD is working to implement best practice recommendations and research findings for optimal IHD care.

QUERI-IHD Projects and Recent Findings

The current focus for QUERI-IHD is a series of efforts to improve lipid management for patients with ischemic heart disease. This effort consists of three major activities; the first two have been completed ("Key Players Study" and "Repeated Rapid Cycle Evidence-Based Quality Improvement Interventions Project"), and the third activity ("National Lipid Clinical Reminders") is presently being evaluated.

Key Players Study

The intervention phase of the Lipid Measurement and Management System (LMMS) included implementing pilot interventions in medical centers in Veterans Integrated Service Network (VISN) 20 to improve concordance with secondary prevention guidelines. The objective of the Key Players Study was to learn more about the interventions, such as the barriers and facilitators to implement interventions at each site. The study also sought to understand the organization of the intervention team and how key players established their roles.

Repeated Rapid Cycle Evidence-Based Quality Improvement Interventions Project (VISNs 19 & 20)

The repeated rapid cycle interventions in VISN 20 have progressed as the Key Players information from each site was collected and analyzed. QUERI-IHD investigators contacted the intervention teams in each site and shared their findings about the organizational strengths and weaknesses related to the original intervention(s). Several facilities are continuing the Lipid Clinic interventions, while some have implemented site-specific reminders similar to the National Lipid Clinic reminders. For VISN 19, representatives

from the three intervention sites attended a kick-off meeting for the intervention study. Information on the optimal care of patients with IHD was presented and facility-specific data for lipid measurement and management were provided to each site. A structured tool was used for assessment of readiness to change. Training sessions are planned to increase provider awareness and use of clinical reminders. A provider who is a clinical reminder champion will conduct these sessions, which will include a demonstration of how to use reminders, information about the advantages of using them, and specifics about the IHD reminders.

National Lipid Clinical Reminders

QUERI-IHD has completed the development of electronic clinical reminders for lipid management using the national Clinical Reminder package from the Computerized Patient Record System (CPRS). An evaluation of the effects of the national IHD clinical reminder intervention in VISN 19 has begun. A provider survey at the intervention sites will be conducted to collect information regarding acceptance and usefulness of the reminders, and guideline adherence. Using VISN and

The QUERI-IHD Executive Committee

Each QUERI Executive Committee is co-chaired by a research expert and a clinician. The Research Coordinator is **Stephan Fihn, MD, MPH**, and the Clinical Coordinator is **Ken Morris, MD**. The QUERI-IHD Executive Committee includes other experts in the field of ischemic heart disease: Jeroan Allison, MD, MS; Ross Fletcher, MD; Mary K. Goldstein, MD, MSc; Frederick Grover, MD; Karl Hammermeister, MD; Paul Allen Heidenreich, MD, MS, FACC; Greg Larsen, MD; Laura Peterson, MD, MPH; Eric Petersen, MD, MPH; John Rumsfeld, MD, PhD; **Anne Sales, MSN, PhD** (Translation Coordinator); and Mark Starling, MD.

national databases (Pharmacy Benefits Management Database, Decision Support System Database, and the National Patient Care Databases at the Austin Automation Center), guideline adherence and outcomes data are also being collected.

Here are a few of the other exciting areas of QUERI-IHD research:

- *Lipid Management for Low HDL Cholesterol:* This project aims to improve low HDL among patients with IHD by using patient education and three different prompting systems to improve management of HDL, as well as LDL, among IHD patients. The overall purpose is to improve the clinical outcomes of veterans with IHD through implementation of evidence-based lipid management, focusing on low HDL levels.
- *Improving Hypertension Management:* This study uses patient group visits to address issues identified by patients as affecting management of hypertension. Its goal is to improve quality of care in treatment of hypertension by implementing VA Clinical Practice Guidelines through group outpatient visits with nurse follow-up.
- *Improving Guideline Concordance for Patients with Chronic Stable Angina:* This project uses facilitated consultation and provider feedback to improve concordance with guideline recommendations for optimal care of patients with chronic stable angina. The goal of the project is to determine whether coordinated team-care results in improved control of angina in patients with IHD compared to routine primary care. The study will employ a multi-modal intervention that involves case-finding, serial measurement of general and condition-specific health-related quality of life, management suggestions and facilitated consultation from cardiologists, and educational efforts by opinion leaders.
- *Process and Outcomes of Care for Acute Coronary Syndromes in the VA:* This project proposes to assess variation in practice patterns for patients admitted to five VA Medical Centers for acute coronary syndrome (either unstable angina or acute myocardial infarction). An important component of this study will be the development of a database to capture key data elements from cardiac catheterization laboratories.

Quality Enhancement Research Initiative

QUERI currently focuses on eight conditions that are prevalent and high-risk among veteran patients: Chronic Heart Failure, Colorectal Cancer, Diabetes, HIV/AIDS, Ischemic Heart Disease, Mental Health, Spinal Cord Injury, and Substance Use Disorders.

The QUERI Process

The QUERI process includes six steps:

- 1) identify high-risk/high volume diseases or problems;
- 2) identify best practices;
- 3) define existing practice patterns and outcomes across VA and current variation from best practices;
- 4) identify and implement interventions to promote best practices;
- 5) document that best practices improve outcomes; and
- 6) document that outcomes are associated with improved health-related quality of life.

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